REMARKS

Claims 1-8 are pending in this application. Claims 1-7 are amended herein. Upon entry of this amendment, claims 1-8 will be pending. Entry of this amendment and reconsideration of the rejections are respectfully requested.

No new matter has been introduced by this Amendment. Support for the amendments to the claims is discussed below.

Claims 1-8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the U.S. Patent of Strickler et al. (6,858,306; hereinafter "Strickler"), in view of the U.S. Patent of Oliver et al. (4,797,317; hereinafter "Oliver"). (Office action paragraphs no. 3-6)

Reconsideration of the rejection is respectfully requested in view of the amendments to the claims.

The amendments to the claims have been made to clarify the recitation regarding "solar reflection properties" in original claim 1. Specifically, claim 1 has been amended to recite "A <u>laminate having a</u> visible light absorbing film," the laminate being formed by coating the film. The other claims have been amended for consistency with the amendment of claim 1. The amendment clarifies that the limitations of claim 1 of "visible light reflectance of 10% or more" is on the **substrate**, and the limitations on "the degree of reduction of visible light reflectance" and "the

degree of reduction of solar radiation reflectance" are for the **laminate**, that is, the combination of film on one or both sides of a substrate.

That is, the laminate recited in amended claim 1 has the following construction:

(A) a substrate having solar radiation reflecting properties and visible reflectance of 10% or more;

(B) a laminate having a visible light absorbing film formed by a visible light absorbing ink having been coated on one side or both sides of the substrate;

(C) the degree of reduction of visible light reflectance is 0.9 or less as defined by degree of reduction of visible light reflection = [visible light reflectance (%) of the laminate after coating of the ink]/[visible light reflectance (%) of the substrate before coating of the ink]; and

(D) the degree of reduction of solar radiation reflectance is 0.25 or more as defined by degree of reduction of solar radiation reflectance = [solar radiation reflectance (%) of the laminate after coating of the ink]/[solar radiation reflectance (%) of the substrate before coating of the ink].

<u>Support for this amendment is as follows</u>:

The "laminate having a visible light absorbing film," which is noted above as limitation (B), is based on the recitation of claim 6 before amendment, that is, a "laminate formed by providing the visible light absorbing film."

The "degree of reduction of visible light reflection = [visible light reflectance (%) of the <u>laminate</u> after coating of the ink]/[visible light reflectance (%) <u>of the substrate</u> before coating of the

ink]," which is noted above as limitation (C), is based on the description at page 23, lines 5-13, of the specification where it is stated that:

> "In Table 1, the degree of reduction of visible light reflectance is a value defined by degree of reduction of visible light reflectance = [visible light reflectance (%) of each <u>Example</u>]/[visible light reflectance according to <u>Comparative Example</u> before coating of the visible light absorbing ink, i.e., 52.1 or 53.4 (%)], and is an index showing the extent to which the visible light reflectance has lowered. The value of 0.9 or less is regarded as being acceptable." (emphasis added)

That is, the above-mentioned "visible light reflectance (%) before coating of the visible light absorbing ink in the Comparative Example" points to the visible light reflectance of an Al vacuum-deposited semitransparent PET film which is a substrate before coating of the ink. In the meanwhile, the above-mentioned "visible light reflectance (%) of the Example" points to the visible light reflectance of the laminate having a visible light absorbing film formed by a visible light absorbing ink having been coated on an Al vacuum-deposited semitransparent PET film which is a substrate.

In addition, the "degree of reduction of solar radiation reflectance = [solar radiation reflectance (%) of the laminate after coating of the ink]/[solar radiation reflectance (%) of the substrate before coating of the ink," which is noted above as limitation (D), is based on the description at page 23, lines 14-23 of the specification where it is stated that:

> "In Table 1, the degree of reduction of solar radiation reflectance is also a value defined by degree of reduction of solar radiation reflectance = [solar radiation reflectance (%) of each Example]/[solar radiation reflectance according to Comparative Example before coating of the visible light absorbing ink, i.e., 55.3 or 51.9 (%)], and is an index showing the extent to which the solar radiation reflectance has lowered. The value of 0.25 or more is regarded as being acceptable."

That is, the above-mentioned "solar radiation reflectance (%) before coating of the visible light absorbing ink in the Comparative Example" points to the solar radiation reflectance of an Al vacuum-deposited semitransparent PET film which is a substrate before coating of the ink. In the meanwhile, the above-mentioned "solar radiation reflectance (%) of the Example" points to the solar radiation reflectance of the laminate having a visible light absorbing film formed by a visible light absorbing ink having been coated on an Al vacuum-deposited semitransparent PET film which is a substrate.

Arguments against the obviousness rejection over Strickler in view of Oliver:

(1) Regarding the Strickler reference

(1-1) Strickler discloses a coated glass article comprising a glass substrate, a coating of antimony doped tin oxide adhering to the glass substrate, and a coating of fluorine doped tin oxide adhering to the coating of antimony doped tin oxide (see claim 1).

(1-2) Based on the description of Strickler in column 2, lines 23-24 where it is stated that "The coated glass article has a visible light transmittance of 63% or more" and also on the description of Oliver in column 2, lines 67-68 where it is stated that "...a light transmission on the order of 20-30%, for example, implies reflectivity of 70-80%," the examiner asserts that the coated glass article of Strickler can be deemed as having a visible light reflectance of 10% or more. However, this visible light reflectance deemed by the examiner as being 10% or more is directed to the visible light reflectance of the **glass article on which the coating of antimony doped tin oxide**

and the coating of fluorine doped tin oxide have been provided, but is **not directed to the substrate before coating**.

Applicant therefore submits that even when the coated glass article has a visible light transmittance of 63% or more, there is no basis in fact and/or technical reasoning for concluding that the glass article before coating exhibits a visible light reflectance of 10% or more.

(1-3) Consequently, there is nothing in Strickler to teach the "visible light reflectance of 10% or more" in the substrate of the presently claimed invention, which visible light reflectance is noted above as limitation (A). Nor does Strickler teach the visible light reflectance and solar radiation reflectance of a substrate before coating. Therefore, the "degree of reduction of visible light reflectance" and "degree of reduction of solar radiation reflectance, that is, limitations (C) and (D) according to the present invention, are neither taught nor suggested by Strickler.

(2) Regarding the Oliver reference

(2-1) Oliver teaches a solar control, composite sheet comprising, as main components, a first polymeric film layer having a metal vignette layer, and a second polymeric, dye-impregnated film layer laminated to the first polymeric layer via an adhesive layer with the vignette layer interposed between the first and second polymeric film layers. The composite sheet has a structure of [second polymeric, dye-impregnated film layer]/[adhesive layer]/[first polymeric film layer having a metal vignette layer].

(2-2) In contrast, the laminate of the present invention is constituted of a "substrate" having solar radiation properties and visible light reflectance of 10% or more, a "visible light absorbing film" formed by a visible light absorbing ink having been coated on one side or both sides of the substrate.

(2-3) Here, the [first polymeric film layer having a metal vignette layer] of Oliver is presumed to correspond to the "substrate" of the present invention, and the [second polymeric, dye-impregnated film layer] of Oliver is presumed to correspond to the "visible light absorbing film" of the present invention. In this way, when comparison is made between the present invention and Oliver's invention, the following differences can be found.

(i) The "visible light absorbing film" of the present invention is formed by a visible light absorbing ink having been coated on the surface of the substrate. Meanwhile, in Oliver, the [second polymeric, dye-impregnated layer] is bonded via an adhesive layer to the [first polymeric film layer having a vignette layer]. That is, Oliver does not employ a method by which a visible light absorbing ink is coated on the surface of the [first polymeric film layer having a vignette layer] so as to form the [second polymeric film, dye-impregnated layer], but employs a method by which the [second polymeric film, dye-impregnated layer] is laminated by the use of an adhesive.

(ii) In column 3, lines 60-63, Oliver teaches that with regard to the above-mentioned [second polymeric, dye-impregnated film layer], a dye-coated layer may be formed by spraying, printing or the like, other than dye impregnation, which dye-coated layer may eventually be used as a [second polymeric, dye-coated layer].

However, in this disclosure, a method is employed by which the second polymeric film layer having a dye-coated layer formed by spraying, printing or the like is laminated, by using an adhesive, to the first polymeric film layer having a metal vignette layer.

Thus, such a solar control, composite sheet additionally has a second polymeric film layer and an adhesive layer other than the dye-coated layer (apparently, the dye-coated layer corresponds to the visible light absorbing film of the present invention). Consequently, this composite sheet cannot be equated with the laminate of the present invention.

(2-4) The "visible light absorbing film" of the present invention, which is formed by coating of a visible light absorbing ink at least on one side of the "substrate," cannot be considered to be the same material as the [second polymeric, dye-impregnated film layer], which has been laminated, by using an adhesive, to the [first polymeric film layer having a metal vignette layer] which corresponds to the substrate of the present invention. Thus, Oliver does not in any way teach the "degree of reduction of visible light reflectance" and "degree of reduction of solar radiation reflectance" limitations of the present invention, these two degrees of reduction having been defined on condition of the "visible light absorbing film" formed by coating a visible light absorbing ink at least on one side of the "substrate" in the present invention. Nor does Oliver even suggest these degrees of reduction.

(2-5) Here, even when the visible light reflectance (%) and solar radiation reflectance (%) of the [first polymeric film layer having a vignette layer] <u>before lamination</u> of the [second polymeric, dye-impregnated film layer], and the visible light reflectance (%) and solar radiation reflectance (%)

of the [first polymeric film layer having a vignette layer] after lamination of the [second polymeric, dye-impregnated film layer] are measured in order to calculate the degrees of reduction which correspond respectively to the "degree of reduction of visible light reflectance" and "degree of reduction of solar radiation reflectance" according to the present invention, such degrees of reduction calculated in Oliver cannot be equated with the "degree of reduction of visible light reflectance" and "degree of reduction of solar radiation reflectance" according to the present invention. This is because, in Oliver, no method is employed by which a [second polymeric, dye-coated film layer] is formed by coating a visible light absorbing ink at least on one side of a substrate.

(3) Regarding the combination of Strickler with Oliver

Strickler even if taken in combination with Oliver does not provide the "laminate" of amended claim 1, having the limitations summarized as (A)-(D) above. The present claims are therefore not obvious over Strickler and Oliver, taken separately or in combination.

Claims 4, 5 and 7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Strickler, in view of Oliver et al., as applied to Claims 1-5 above, and further in view of the Japanese Patent Publication of Toshiharu et al. (JP 10-182190; hereinafter "Toshiharu"). (Office action paragraph no. 7)

Reconsideration of the rejection is respectfully requested in view of the amendments to the claims, which have been discussed above.

Applicant has argued above that the present claims, as amended, are not obvious over Strickler and Oliver, taken separately or in combination. Toshiharu is cited for disclosing that a thin film layer can contain aluminum, copper or silver, and can contain pigment particles. However, Applicant submits that the disclosure of Toshiharu, even if combined with Oliver and Strickler, cannot overcome the deficiencies in the *prima facie* case of obviousness based on those references.

Claim 7 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Strickler, in view of Oliver et al., as applied to Claims 1-5 above, and further in view of the Japanese Patent Publication of Masaaki et al. (JP 2000-238170; hereinafter "Masaaki"). (Office action paragraph no. 10)

Reconsideration of the rejection is respectfully requested in view of the amendments to the claims, which have been discussed above.

Applicant has argued above that the present claims, as amended, are not obvious over Strickler and Oliver, taken separately or in combination. Masaaki is cited for disclosing that a transparent conductive film layer can contain a dark-colored azo pigment. However, Applicant submits that the disclosure of Masaaki, even if combined with Oliver and Strickler, cannot overcome the deficiencies in the *prima facie* case of obviousness based on those references.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicants' undersigned agent at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, the applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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Petition for Extension of Time

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